DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014353 Address: 333 Burma Road **Date Inspected:** 17-May-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A Yes N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS: Delayed / Cancelled:** Yes No N/A

34-0006 **Bridge No: Component: OBG Segment**

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

Segment 7CW/7DW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBW7A-004. The welder is identified as #045196 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1. UT repair for WR12774 approximately 900mm in length beginning 50mm from Side Plate to Bottom Plate Splice.

Segment 8BW/8CW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SP765-001-044, 046. The welder is identified as #045268 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-P-2213-B-U2a-1.

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Segment 8AW

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SSD25-PP063-061. The welder is identified as #067609 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-P-2213-TC-U4b-FCM-1 converting fillet weld joint to CJP, B-JC48 R0.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as SSD25-PP063-153, 154. The welder is identified as #067079 and was observed welding in the 3F (vertical) position using approved Welding Procedure Specification WPS-B-T-2133.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SSD25-PP063-047. The welder is identified as #067609 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1.

This QA Inspector observed the removal of the damaged section of the FL2-2 floor beam web at panel point 64, portion was removed by flame cutting approximately 1195mm in length.

Segment 8BE/8CE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as SP539-001-055. The welder is identified as #220069 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2233-B-U2-F.

Segment 8CE

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as SP540-001-026, 027. The welder is identified as #220069 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

Segment 7DE/7EE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated as OBE7F-011, 012. The welder is identified as #051359 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-P-2112-FCM-1.

Segment 7DW/7EW

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Bottom Plate transverse CJP splice and the Side Plate transverse CJP splice, D scan was performed

Segment 8CE

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This QA Inspector observed match drilling on the Side Plate WT stiffener flange for the bolted splice plates.

ZPMC Quality Control (QC) Inspector is identified as Fang Ya Jun. QA Inspector observed QC Inspector verify welding parameters. The welding variables recorded by QC appeared to comply with the Applicable WPS.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Hernandez,Dan	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer